

# OPERATOR'S MANUAL

**Model Series  
967K**



## **IMPORTANT: READ SAFETY RULES AND INSTRUCTIONS CAREFULLY**

**Warning:** This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator. In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest engine authorized service dealer or contact the service department, P.O. Box 368022 Cleveland, Ohio 44136-9722.

**MTD PRODUCTS INC. P.O. BOX 368022 CLEVELAND, OHIO 44136-9722**

# Table of Contents

Content	Page
Slope Gauge .....	3
Safe Operation Practices .....	4
Finding Model Number .....	6
Calling Customer Support .....	7
Unpacking Instructions .....	7
Set-Up Instructions.....	8
Controls .....	10
Operation.....	11
Adjustments.....	14
Maintenance .....	16
Lubrication.....	20
Off-Season Storage.....	21
Trouble-Shooting.....	22
Parts List .....	24

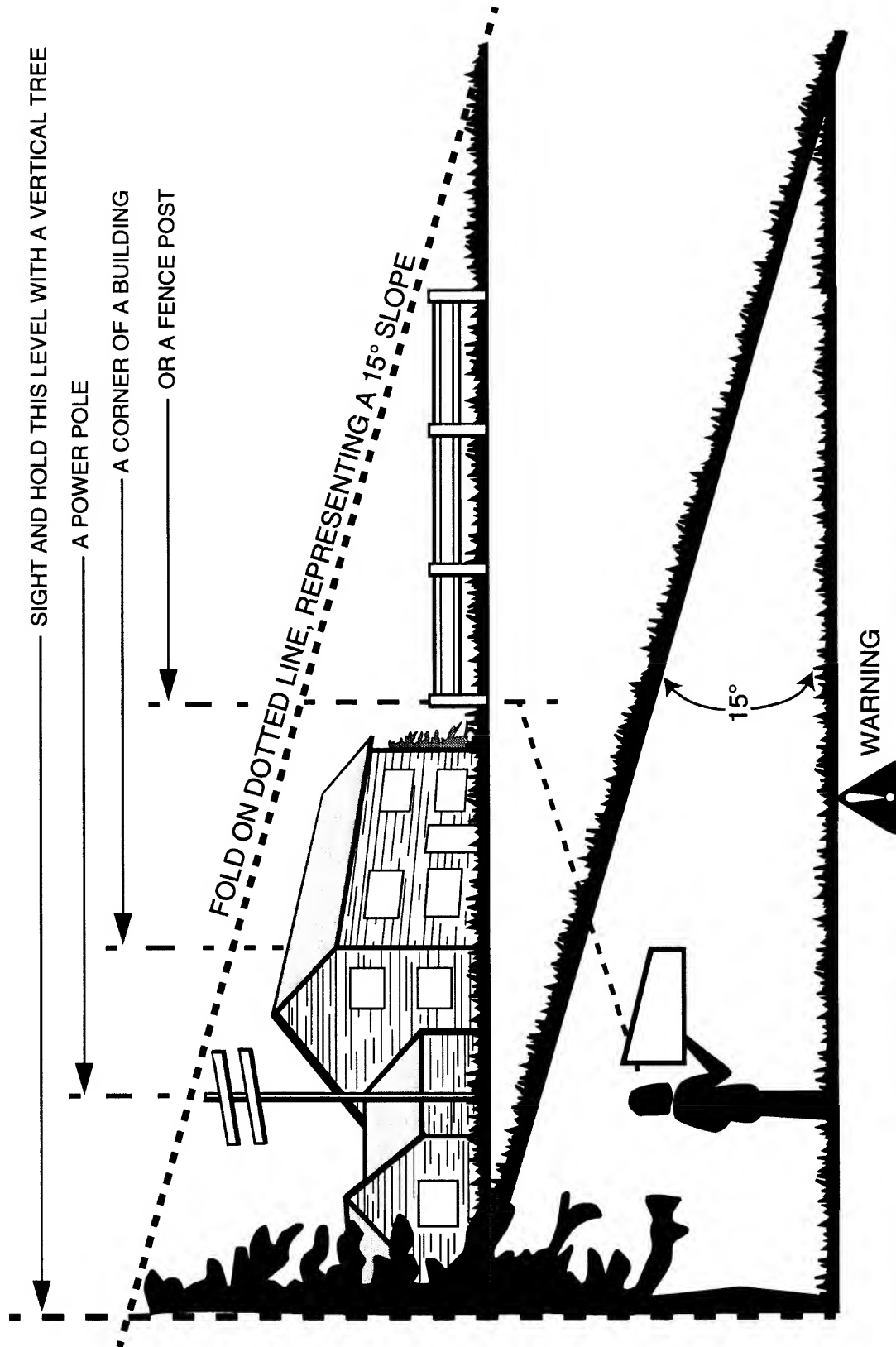
Restrict the use of this power equipment to persons who read, understand and follow the warnings and instructions in this manual and on the unit.



**WARNING:** The Engine Exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

## SECTION 1: SLOPE GAUGE

USE THIS PAGE AS A GUIDE TO DETERMINE SLOPES WHERE YOU MAY NOT OPERATE SAFELY.



Do not mow on inclines with a slope in excess of 15 degrees (a rise of approximately 2-1/2 feet every 10 feet). A riding mower could overturn and cause serious injury. If operating a walk-behind mower on such a slope, it is extremely difficult to maintain your footing and you could slip, resulting in serious injury.

Operate RIDING mowers up and down slopes, never across the face of slopes.

Operate WALK-BEHIND mowers across the face of slopes, never up and down slopes.

---

## SECTION 2: IMPORTANT SAFE OPERATION PRACTICES



**WARNING:** THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH, IF NOT FOLLOWED, COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE YOUR LAWN MOWER. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY. WHEN YOU SEE THIS SYMBOL, HEED ITS WARNING.



**DANGER:** Your lawn mower was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. This lawn mower is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

### 1. GENERAL OPERATION

- Read this owner's guide carefully in its entirety before attempting to assemble this machine. Read, understand, and follow all instructions on the machine and in the manual(s) before operation. Be completely familiar with the controls and the proper use of this machine before operating it. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
- Your rotary mower is a precision piece of power equipment, not a plaything. Therefore, exercise extreme caution at all times. Your unit has been designed to perform one job: to mow grass. Do not use it for any other purpose.
- Never allow children under 14 years old to operate a power mower. Children 14 years old and over should only operate mower under close parental supervision. Only responsible individuals who are familiar with these rules of safe operation should be allowed to use your mower.
- Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower to help prevent blade contact or thrown object injury. Although the area of operation should be completely cleared of foreign objects, an object may have been overlooked and could be accidentally thrown by the mower in any direction and cause serious personal injury to the operator or any others allowed in the area.
- Thoroughly inspect the area where the equipment is to be used. Remove all stones, sticks, wire, bones, toys and other foreign objects which could be picked up and thrown by the mower in any direction and cause serious personal injury to the operator or any others allowed in the area. Plan your mowing pattern to avoid discharge of material toward roads, sidewalks, bystanders and the like. To help avoid a thrown objects injury, keep children, bystanders and helpers at least 75 feet from the mower while it is in operation.
- Always wear safety glasses or safety goggles during operation or while performing an adjustment or repair, to protect eyes from foreign objects that may be thrown from the machine in any direction.
- Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts. Shirts and pants that cover the arms and legs and steel-toed shoes are recommended. Do not wear loose fitting clothes or jewelry. They can be caught in moving parts. Never operate a unit in bare feet, sandals, slippery or light weight (e.g. canvas) shoes.
- Do not put hands or feet near or under rotating parts. Keep clear of discharge opening at all times as the rotating blade can cause injury.
- Many injuries occur as a result of the mower being pulled over the foot during a fall. Do not hang on to the mower if you are falling; release the handle immediately.
- Never pull the mower toward you while you are walking. If you must back the mower away from a wall or obstruction first look down and behind, and then follow these steps:
  - Step back from the mower to fully extend your arms.
  - Be sure you are well balanced with sure footing.
  - Pull the mower back slowly, no more than half way toward you.
  - Repeat these steps as needed.
- Do not operate the mower while under the influence of alcohol or drugs.
- Do not engage the self-propelled mechanism on units so equipped while starting engine.
- The blade control handle is a safety device. Never attempt to bypass its operation. Doing so makes the safety device inoperative and may result in personal injury through contact with the rotating blade. The blade control handle must operate easily in both directions and automatically return to the disengaged position when released.

- Never operate the mower in wet grass. Always be sure of your footing. A slip and fall can cause serious personal injury. Keep a firm hold on the handle and walk, never run. If you feel you are losing your footing, **RELEASE THE BLADE CONTROL HANDLE IMMEDIATELY** and the blade will stop rotating within three seconds.
- Mow only in daylight or good artificial light.
- Stop the blade when crossing gravel drives, walks or roads.
- If the equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
- Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher or unclogging the chute. The cutting blade continues to rotate for a few seconds after the engine is shut off. Never place any part of the body in the blade area until you are sure the blade has stopped rotating.
- Never operate mower without proper guards, grass catcher, plates or other safety protective devices in place.
- Muffler and engine become hot and can cause a burn. Do not touch.
- Only use accessories approved for this machine by the manufacturer. Read, understand, and follow all instructions provided with the approved accessory.
- If situations occur which are not covered in this manual, use care and good judgment. Contact your dealer for assistance. Telephone 1-800-800-7310 for the name of your nearest dealer.

## 2. SLOPE OPERATION

For your safety, use the slope gauge included as part of this manual to measure slopes before operating this unit on a sloped or hilly area. If the slope is greater than 15 degrees as shown on the slope gauge, do not operate this unit on that area or serious injury could result.

### DO:

- Mow across the face of slopes; never up and down. Exercise extreme caution when changing direction on slopes.
- Watch for holes, ruts, hidden objects, or bumps. Tall grass can hide obstacles.
- Always be sure of your footing. A slip and fall can cause serious personal injury. If you feel you are losing your balance release the blade control handle immediately and the blade will stop in less than 3 seconds.
- **ON MODELS WITH CASTER WHEELS:** Lock both front wheels so they do not pivot while mowing on the face of slopes. To turn the mower, depress the handle and raise the front wheels slightly.

### DO NOT:

- Do not mow near drop-offs, ditches or embankments. The operator could lose footing or balance.
- Do not mow slopes greater than 15 degrees as shown on the slope gauge.
- Do not mow on wet grass. Reduced footing could cause slipping.
- **ON MOWERS WITH CASTER WHEELS:** Do Not Mow on slopes with casters unlocked since the mower has a tendency to drift down hill.

## 3. CHILDREN

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the mower and the mowing activity. Never assume that children will remain where you last saw them.

- Keep children out of the mowing area and under the watchful care of a responsible adult other than the operator.
- Be alert and turn mower off if a child enters the area.
- Before and while moving backwards, look behind and down for small children or other objects.
- Never allow children under age 14 to operate the mower. Children 14 years of age and above should read and understand the operation instructions and safety rules in this manual.
- Use extreme care when approaching blind corners, shrubs, trees, or other objects that may obscure your vision of a child or hazard.

## 4. SERVICE

- Use extreme care in handling gasoline and other fuels. They are extremely flammable and the vapors are explosive.
- Use only an approved gasoline container.
- Never remove gas cap or add fuel while the engine is running. Allow engine to cool at least two minutes before refueling.
- Replace gasoline cap securely and wipe off any spilled gasoline before starting the engine as it may cause a fire or explosion.
- Extinguish all cigarettes, cigars, pipes and other sources of ignition.
- Never refuel machine indoors because flammable vapors will accumulate in the area.
- Never store the machine or fuel container inside where there is an open flame or spark such as a gas water heater, space heater, or furnace.
- Never run an engine inside a closed area.
- To reduce fire hazard, keep mower free of grass, leaves, or other debris build-up. Clean up oil or fuel spillage. Allow mower to cool at least 5 minutes before storing.
- Before cleaning, repairing, or inspecting, make certain the blade and all moving parts have stopped.

Disconnect the spark plug wire, and keep the wire away from the spark plug to prevent accidental starting.

- Check the blade and engine mounting bolts at frequent intervals for proper tightness. Also, visually inspect blade for damage (e.g., bent, cracked or worn). Replace with blade which meets original equipment specifications listed in this manual.
- Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
- Never tamper with safety devices. Check their proper operation regularly.
- After striking a foreign object, stop the engine, remove the wire from the spark plug, and thoroughly inspect the mower for any damage. Repair the damage before starting and operating the mower.

- Never attempt to make a wheel or cutting height adjustment while the engine is running.
- Grass catcher components are subject to wear, damage and deterioration, which could expose moving parts or allow objects to be thrown. For safety protection, frequently check components and replace with manufacturer's recommended parts, when necessary.
- Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves, and use extra caution when servicing them.
- Do not change the engine governor setting or overspeed the engine. Excessive engine speeds are dangerous.



**WARNING - YOUR RESPONSIBILITY:** Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.



Figure 1 Safety Labels Found On Lawn Mower

### SECTION 3: FINDING MOWER MODEL NUMBER

This owner's guide is an important part of your new lawn mower. It will help you assemble, prepare and maintain your mower. Please read and understand what it says.

Before you start assembling the mower for its first use, please locate its model plate and copy the information on to this owner's guide. The information on the model plate is very important if you need help from your dealer or the MTD customer support department.

- Every mower has a model plate. You can locate it by standing behind the unit in the operating position and looking down at the cutting deck.

- The model plate will look like Figure 2.

	_____ This is where your model number will be.
	_____ This is where your serial number will be.
	Copy the model number here: _____
	Copy the serial number here: _____

Figure 2

## SECTION 4: CALLING CUSTOMER SUPPORT

If you have any questions regarding assembly, controls, operation or maintenance of this mower, please call the Customer Support Department at

**1-800-800-7310**

Before you call, make sure that you have both the model and serial numbers ready. By offering this information promptly, you help the Customer Support Representative give you faster service. To find your mower's model and serial numbers, see previous section.

## SECTION 5: UNPACKING INSTRUCTIONS

### REMOVE UNIT FROM CARTON

(See Figure 3.)

- Remove staples, break glue on top flaps, or cut tape at carton end and peel along top flap to open carton.
- Remove loose parts if included with unit (i.e., owner's manual, etc.).
- Cut along dotted lines and lay carton down flat.
- Remove packing material.
- Roll or slide unit out of carton. Check carton thoroughly for loose parts.

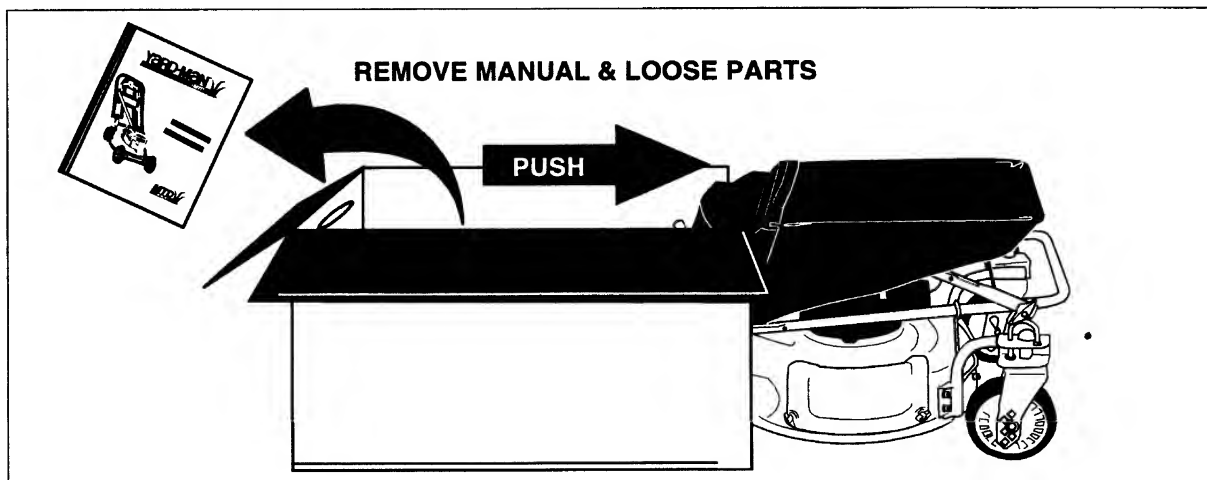


Figure 3

## DISCONNECT SPARK PLUG WIRE

Before setting up your lawn mower, disconnect the spark plug wire from the spark plug, and ground it against the engine by attaching rubber boot to a bolt or metal clip to the grounding post on the engine. See Figure 4.

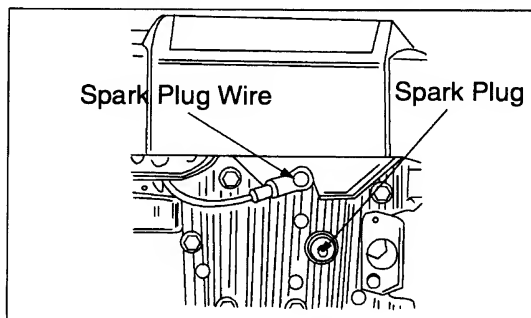


Figure 4

## SECTION 6: SET-UP INSTRUCTIONS

### ITEMS REQUIRED FOR ASSEMBLY

- Pair of Pliers
- Motor Oil
- Fresh Gasoline

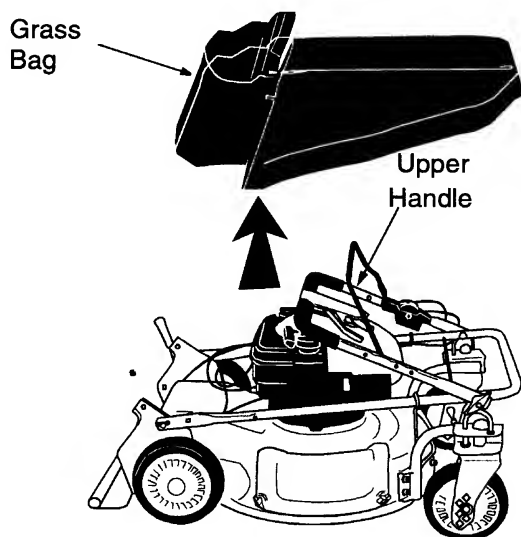
**IMPORTANT:** This unit is shipped WITHOUT GASOLINE or OIL in the engine. Be certain to service engine with gasoline and oil as instructed in the separate engine manual before operating your mower.

**NOTE:** Reference to right or left hand side of the mower is observed from the operating position.

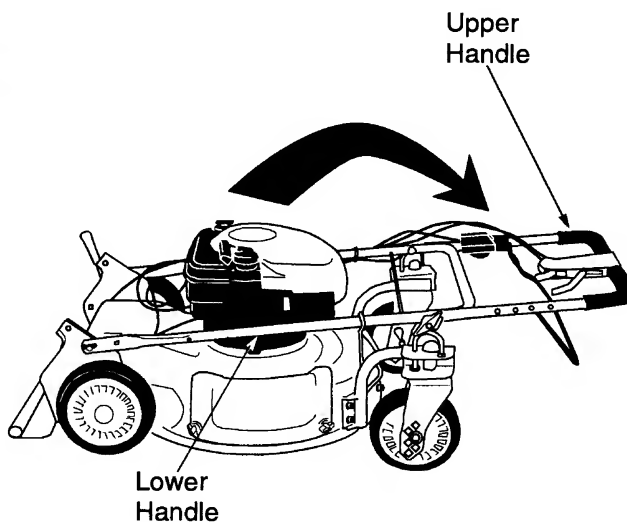
### SETTING UP YOUR LAWN MOWER

Follow steps 1 through 9 to set up your lawn mower.

Step 1. Remove grass bag from unit and set it out of the way.

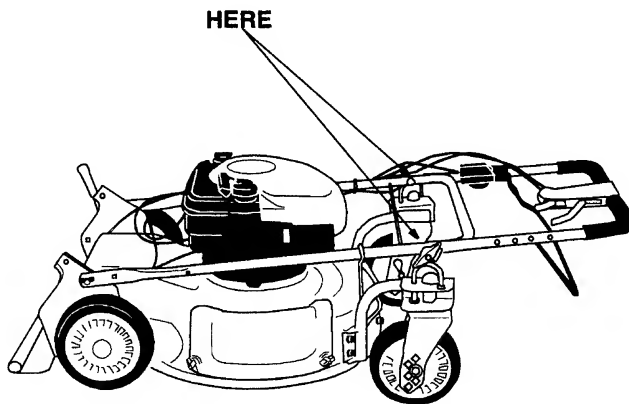


Step 2. Pull up the upper handle in the direction shown below. Align it with lower handle.

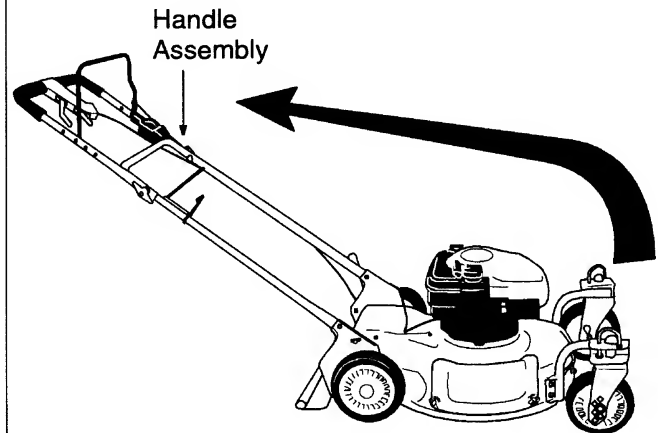




Step 3. Tighten wing nuts.

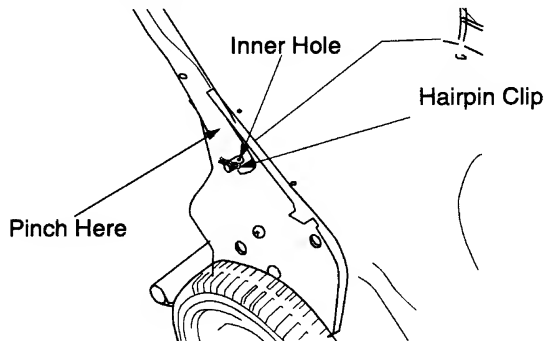


Step 4. Raise complete handle assembly until it clicks into place. Make sure not to kink the control cables.

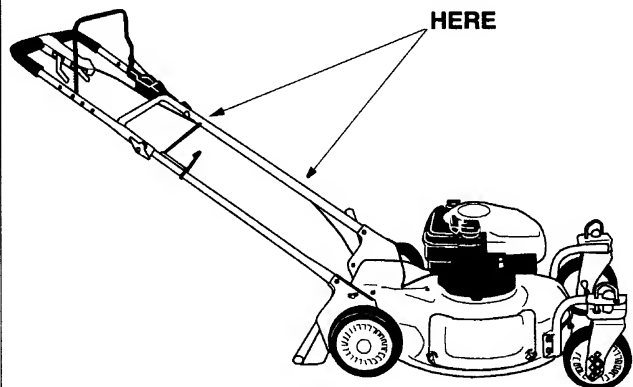


Step 5. Pinch lower handle against mounting bracket with pliers.

Step 6. Move hairpin clip from outer to inner hole on left and right handle mounting brackets.

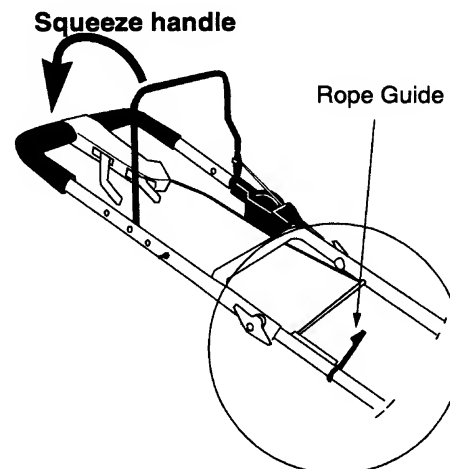
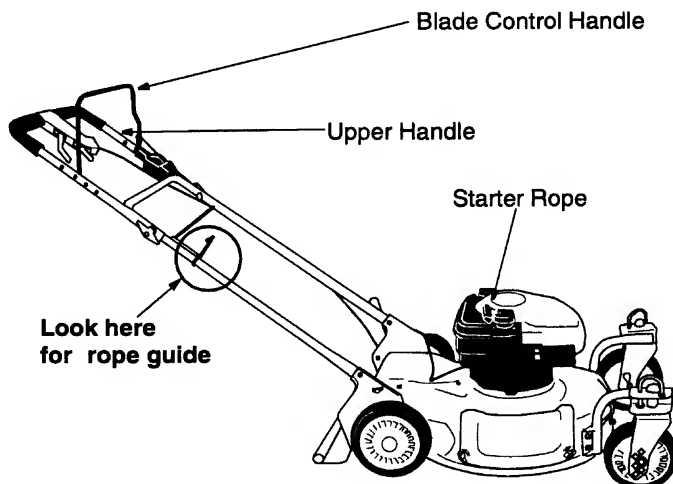


Step 7. Attach control cables to handle with cable ties located on the handle.



Step 8. Squeeze the blade control handle against the upper handle and pull out starter rope slowly.

Step 9. Thread starter rope into rope guide.



- Your mower has been shipped in the lowest cutting position. Please see the “cutting height adjustment lever” section on page 10 of this owner’s guide to adjust cutting height.

## SECTION 7: CONTROLS

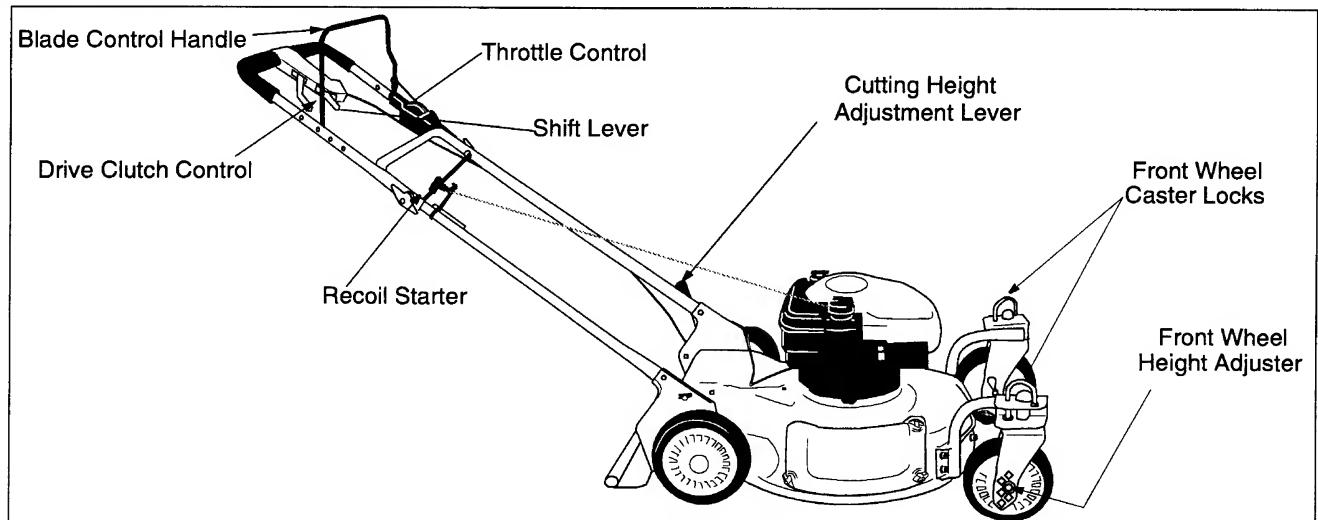


Figure 5

### BLADE CONTROL HANDLE

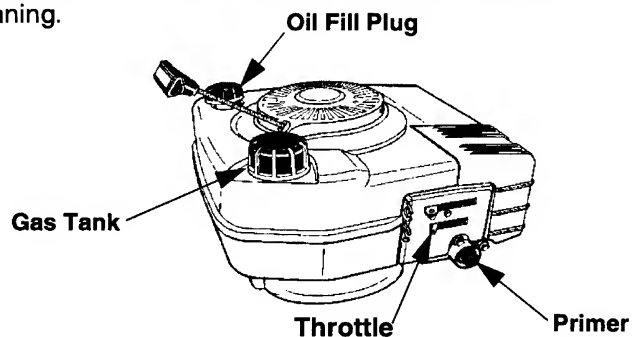
The blade control handle is located on the upper handle of the mower. See Figure 5. The blade control handle must be depressed in order to start and operate the unit. Release the blade control handle to stop the engine and the blade.



**WARNING:** The blade control handle is a safety device. Never attempt to bypass its operations. The blade will be rotating whenever the engine is running.

### THROTTLE CONTROL

The throttle control is used to regulate engine speed. It **cannot** be used to stop the engine.



### PRIMER

The primer is used to pump gas into the carburetor. Use it to start a cold engine, but do not use it to restart a warm engine after a short shutdown.



**WARNING:** The throttle control cannot be used to stop the engine.

### RECOIL STARTER

The recoil starter handle is attached to the lower handle. See Figure 5. Stand behind the unit in the operating position to start the unit.

### DRIVE CLUTCH CONTROL

Squeeze the drive clutch control to engage the drive system; release the clutch control to disengage. Release the clutch control to slow down when negotiating an obstacle, making a turn or stopping.

## SHIFT LEVER

The shift lever is located on the drive clutch control housing on the upper handle. See Figure 5. This lever is used to select the forward speed of the mower. When changing speed selection, release the drive clutch control.

**NOTE:** Move the shift lever only when the engine is running. Changing the shift lever setting with the engine off can cause damage to the mower.

## CUTTING HEIGHT ADJUSTMENT LEVER

The **rear wheel** cutting height adjustment lever is located above the left rear wheel. To adjust the cutting height, pull the lever out and away from the mower. Move it forward or back to the desired cutting height. See figure 5.

The **front wheel** cutting height is determined by the selection of one of six positions in each caster assembly.

To adjust, remove the wing nut from the axle bolt. Slide the axle bolt and spring washer from the assembly and select a cutting height. With the spring washer on the axle bolt, reinsert hardware in the square hole desired, through the wheel assembly and secure with the wing nut previously removed.

**IMPORTANT:** All wheels must be placed in the same relative position. For rough or uneven lawns, raise the cutting height of your mower.

## CASTER LOCK



**Warning:** When operating mower on hills, front wheels should be locked in the straight ahead position.

The casters can be locked in a straight ahead position or can be left to swivel freely.

- Lift and place the lock pins in the larger holes to lock the wheels for straight-ahead operation.
- Place pins in smaller holes to allow casters to rotate freely for turning.

## ENGINE CONTROLS

See the engine manual for the location and function of the controls located on the engine.

---

## SECTION 8: OPERATION



**WARNING:** Keep hands and feet away from the chute area on the cutting deck. See Figure 1. The operation of any lawn mower can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields.

**NOTE:** For best results, raise the cutting position until it is determined which height is best for your lawn. See CUTTING HEIGHT ADJUSTMENT LEVER in the CONTROLS section.

## GAS AND OIL FILL-UP

Service the engine with gasoline and oil as instructed in the separate engine manual. Read all instructions carefully.



**WARNING:** Never fill fuel tank indoors, with engine running or until the engine has been allowed to cool for at least two minutes after running.

## EACH TIME BEFORE YOU START YOUR MOWER

- Attach spark plug wire to spark plug. Make certain the metal cap on the end of the spark plug wire is fastened securely over the metal tip on the spark plug.
- Check for proper drive clutch operation using the NEUTRAL ADJUSTMENT TEST.

## NEUTRAL ADJUSTMENT TEST

To perform the NEUTRAL ADJUSTMENT TEST, answer the following questions.

- With the drive clutch control released, push mower forward and pull it backward. Does it move freely?
- Squeeze the drive clutch control and pull the mower backward. Do the rear wheels lock (not turn)?
- Is the drive clutch control cable free of kinks or sharp bends?

If you answered “**yes**” to all three questions, your mower passed the test and you can start your mower. If you answered “**no**” to any of the three questions, you need to go through the DRIVE CLUTCH CONTROL ADJUSTMENT section on page 15 of this manual.

## TO START ENGINE AND ENGAGE BLADE

- Move the throttle control lever all the way forward.
- Prime or choke engine as instructed in the separate engine manual.
- Stand behind the unit, squeeze and hold the blade control handle against the upper handle.
- Grasp starter handle and pull rope out slowly until engine reaches start of compression cycle (rope will pull slightly harder at this point). Let the rope rewind slowly.
- Pull rope with a rapid, continuous, full arm stroke. Keep a firm grip on starter handle. Return it slowly to the rope guide.
- After engine starts, move throttle control to desired engine speed. (The mower is designed to be operated at full throttle.)

**NOTE:** If any problems are encountered, refer to the TROUBLE SHOOTING section of this manual.

## TO STOP ENGINE AND BLADE

- Release the blade control handle to stop the engine and blade.



**WARNING:** The blade continues to rotate for a few seconds after the engine is shut off.

## USING YOUR ROTARY MOWER

Be sure that the lawn is clear of stones, sticks, wire, or other objects which could damage the lawn mower or the engine. Such objects could be accidentally thrown by the mower in any direction and cause serious personal injury to the operator and others.

For best results, do not cut wet grass because it tends to stick to the underside of the mower, preventing proper discharge of grass clippings, and could cause you to slip and fall. New grass, thick grass or wet grass may require a narrower cut.

For a healthier lawn, never cut off more than one-third of the total length of the grass. Your lawn should be cut in the fall as long as there is growth.

This mower is designed to be operated at full throttle to give you the best cut and do the most effective job of mowing or mulching.



**WARNING:** If you strike a foreign object, stop the engine. Remove wire from spark plug, thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower. Extensive vibration of the mower during operation is an indication of damage. The unit should be promptly inspected and repaired.

## BAGGING GRASS CLIPPINGS

This mower can bag grass clippings. Follow steps 1 through 3 to ready the mower for bagging.

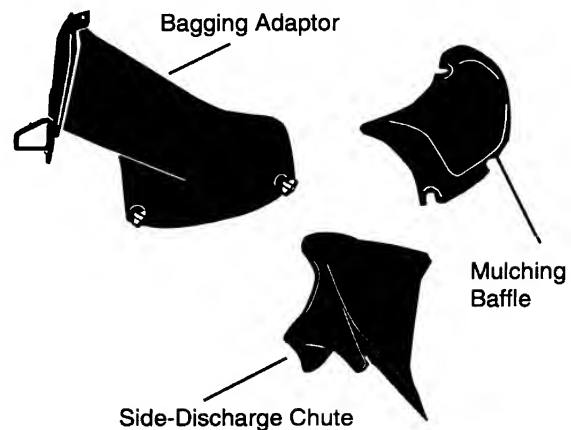
Step 1. Remove three wing nuts holding mulching baffle or side-discharge chute in place. Then remove the plug or the chute as the case may be.



Step 2. Replace with bagging adaptor. Attach using three wing nuts removed earlier. Be sure that inner lip of attachment goes under the edge of the deck.



Step 3. Lift chute door and slide bag onto adaptor. Top of bag rests on wire bracket that extends between the handles.



## EMPTYING YOUR GRASS BAG

Lift grass bag from the bagging adaptor using the lower handle. While holding the lower handle, lift up the rear section of the grass bag. The bag will open and the grass clippings will fall out. See Figure 6.

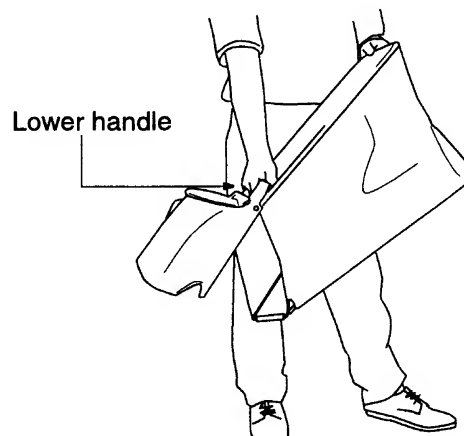
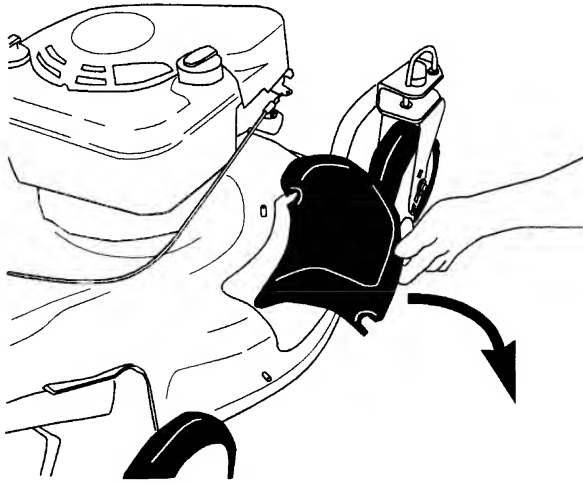


Figure 6

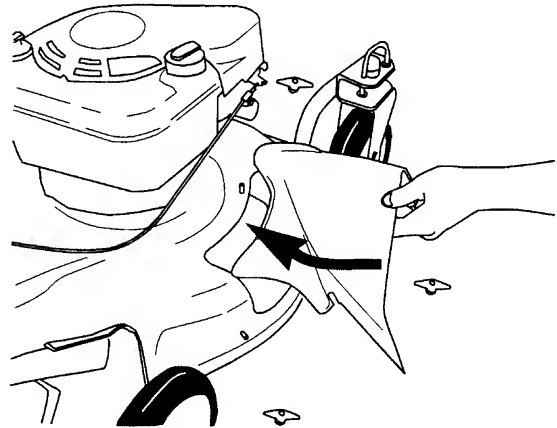
## SIDE-DISCHARGING GRASS CLIPPINGS

This mower can also side-discharge grass clippings. Follow step 1 and 2 to ready this mower for side-discharge operation.

Step 1. Remove mulching baffle or grass bag adapter.



Step 2. Attach discharge chute with wing nuts.



## SECTION 9: ADJUSTMENTS



**WARNING:** Do not at any time make any adjustment to lawn mower without first stopping engine and disconnecting spark plug wire.

### HANDLE HEIGHT ADJUSTMENT

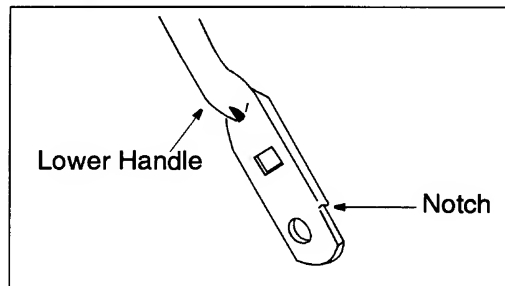


Figure 7

Your mower is shipped with the handle in the higher height position. To lower the handle height, proceed as follows.

- Remove the starter rope from the rope guide.
- Remove the upper handle by removing the hand knobs and carriage bolts. Lay the upper handle out of the way, being careful not to bend or kink the cables.
- Remove the hairpin clips from the weld pins on the handle brackets. Press out on the legs of the lower handle. Remove lower handle from the mower.
- Turn the lower handle around so the notch on the bottom of the lower handle is facing forward as shown in Figure 7. Reassemble, placing the bottom holes in the handle over the weld pins in the handle mounting bracket.
- Reassemble the upper handle to the lower handle.
- Place the hairpin clips in the inner holes in the weld pins and attach the starter rope as instructed in the Set-Up Instructions.

## DRIVE CLUTCH CONTROL ADJUSTMENT

The drive clutch control adjustment wheel is located in the drive clutch control handle housing and is used to tighten or loosen the drive belt. You will have to adjust the drive clutch control if any of the following happens:

- The mower does not propel itself with the drive clutch engaged.
- The mower's drive wheels hesitate with the drive clutch engaged.

To resolve the above problems, rotate the adjustment wheel with your fingers: clockwise to tighten the cable and counter-clockwise to loosen the cable. See Figure 9.

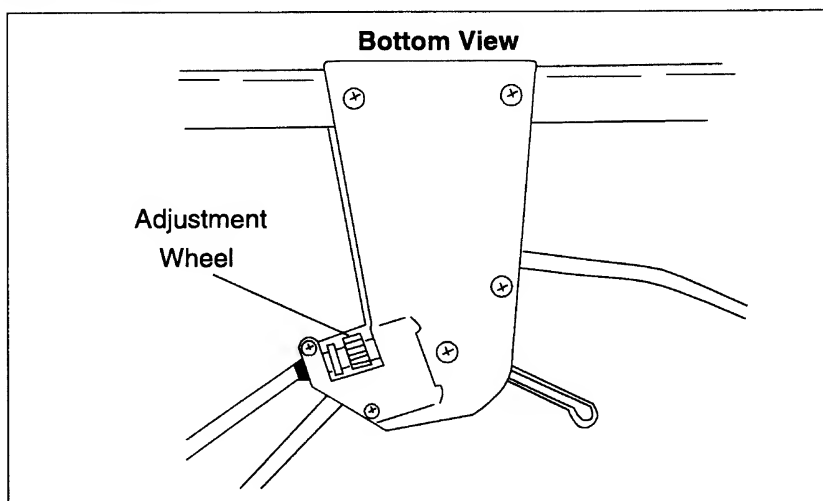


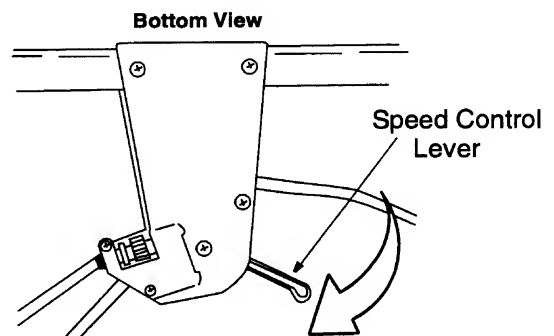
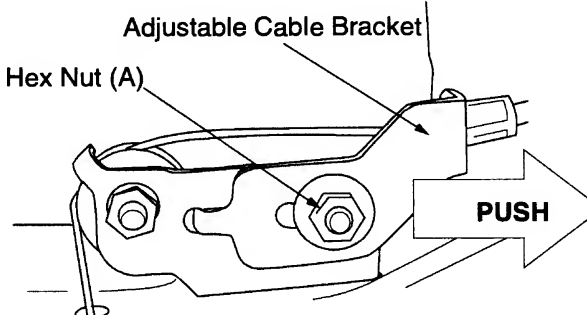
Figure 8

**Note:** For some operators, the drive clutch handle may not be in a comfortable position. You can adjust the handle by tightening the adjustment wheel.

## SHIFT LEVER CABLE ADJUSTMENT

Periodic adjustment of the six-speed shift cable may be required due to normal wear on the cable. Adjustment is needed if all six speeds do not work.

The adjustable cable bracket is located on the left side of the mower beside the engine. Follow steps 1 through 7 to adjust the shift lever.

 <p>Step 1. Start engine.</p> <p>Step 2. Place speed control in the sixth speed position.</p> <p>Step 3. Stop engine.</p> <p>Step 4. Disconnect spark plug wire and ground it.</p>	 <p>Step 5. Loosen hex nut (A) which secures the adjustable cable bracket.</p> <p>Step 6. Push back on the adjustable cable bracket.</p> <p>Step 7. Tighten hex nut (A).</p>
---	--

---

## SECTION 10: MAINTENANCE



**WARNING:** Be sure to disconnect and ground the spark plug wire before performing any repairs or maintenance.

**NOTE:** When tipping the unit, empty the fuel tank and keep the engine with the spark plug side up. Never tip the mower more than 90 degrees and do not leave the mower tipped for any length of time. Oil can drain into the upper part of the engine causing a starting problem.

### ENGINE

Refer to the separate engine manual for all engine maintenance instructions.

- Maintain engine oil as instructed in the separate engine manual packed with your unit. Read and follow instructions carefully.
- Service air cleaner every 25 hours under normal conditions. Clean every few hours under extremely dusty conditions. Poor engine performance and flooding usually indicates that the air cleaner should be serviced. To service the air cleaner, refer to the separate engine manual packed with your unit.
- The spark plug should be cleaned and the gap reset once a season. Spark plug replacement is recommended at the start of each mowing season; check engine manual for correct plug type and gap specifications.
- Clean the engine regularly with a cloth or brush. Keep the cooling system (blower housing area) clean to permit proper air circulation which is essential to engine performance and life. Be certain to remove all grass, dirt and combustible debris from muffler area.

### DECK

The underside of the mower deck should be cleaned after each use to prevent a buildup of grass clippings, leaves, dirt or other matter. If this debris is allowed to accumulate, it will invite rust and corrosion, and may prevent proper mulching, discharge or bagging.

The deck may be cleaned by tilting the mower and scraping clean with a suitable tool (make certain the spark plug wire is disconnected).

### CUTTING BLADE REMOVAL, REPLACEMENT AND SHARPENING

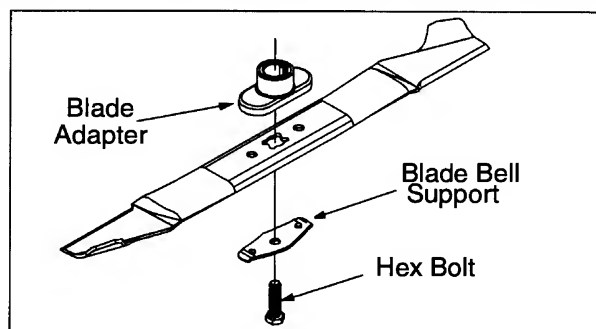


Figure 9

- When removing the cutting blade for sharpening or replacement, protect hands by wearing heavy gloves or using a heavy rag to hold the blade.
- Remove the bolt and the blade bell support which hold the blade and the blade adapter to the engine crankshaft.
- Remove the blade and the blade adapter from the crankshaft.





**WARNING:** Periodically inspect the blade adapter for cracks, especially if you strike a foreign object. Replace when necessary.

When sharpening the blade, follow the original angle of grind as a guide. It is extremely important that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds. It may cause damage to the mower, and it could break causing personal injury.

The blade can be tested by balancing it on a round shaft screwdriver. Remove metal from the heavy side until it balances evenly. It is recommended that the blade always be removed from the adapter when testing for balance. Before reinstalling the blade and the blade adapter to the unit, lubricate the engine crankshaft and the inner surface of the blade adapter with light oil.

- Be sure to install the blade with the side of the blade marked "Bottom" (or with part number) facing the ground when the mower is in the operating position. See Figure 9.
- Slide blade adapter towards the engine crankshaft.
- Place blade on adapter. Be certain the blade is aligned with and seated on the blade adapter flanges.
- Place blade bell support on blade. Make sure the notches on the blade bell support are aligned with the small hole in the blade.
- Replace hex bolt.
- Torque hex bolt to: 450 in. lbs. min., 600 in. lbs. max.

**NOTE:** To ensure safe operation of your unit, the blade bolt must be checked periodically for correct torque.

## DRIVE BELT REMOVAL AND REPLACEMENT

Step 1. Disconnect the spark plug wire and ground it against the engine.

Step 2. Drain the fuel tank or place a piece of plastic beneath the cap to prevent gasoline leakage.

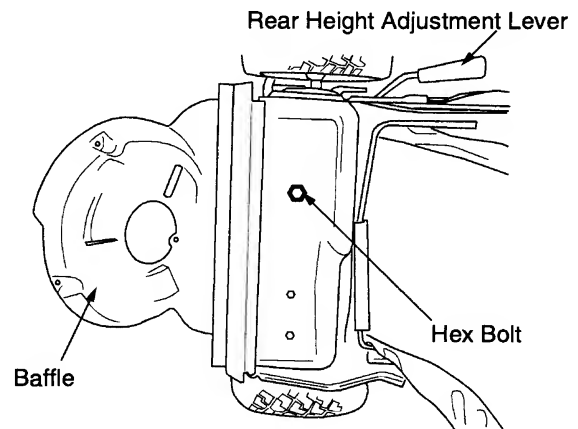
Step 3. Place shift lever in the first position.

Step 4. Tip the mower on its side. Block securely.

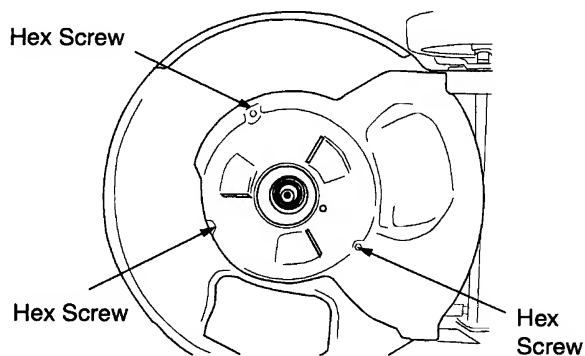
Step 5. Remove the center bolt which secures the blade to the crankshaft. Remove the blade, and the blade adapter, wave washer, and spacer.

Step 6. Move rear height adjustment lever to the sixth position.

Step 7. Remove the hex bolt holding the transmission to the mower housing.



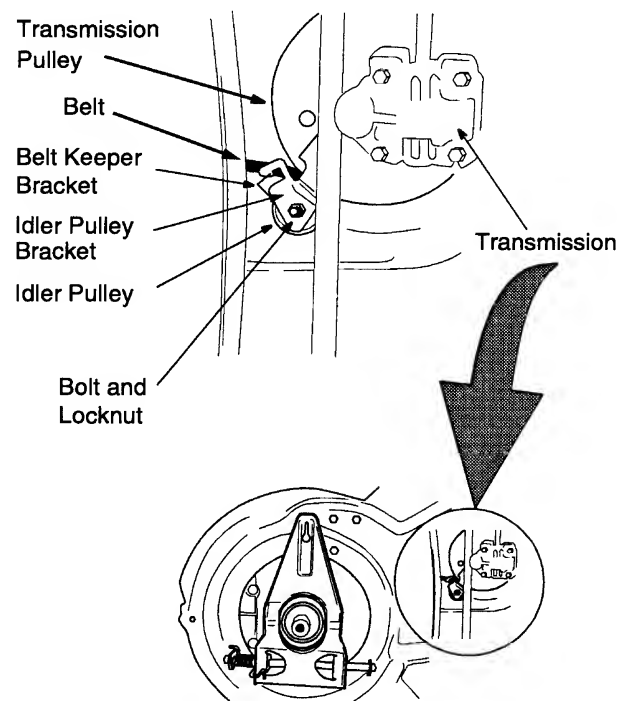
Step 8. Using a 3/8" socket, remove three hex screws holding the baffle to the deck.



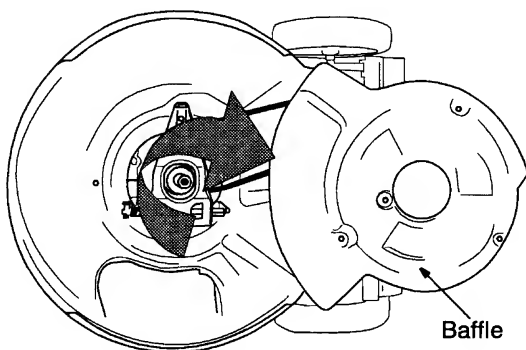
Step 9. Tilt the transmission forward and loosen the idler pulley bolt and locknut 1/2 turn using two 7/16" wrenches.

Step 10. Using a pair of pliers, pull back and rotate belt keeper bracket from the slot on idler pulley.

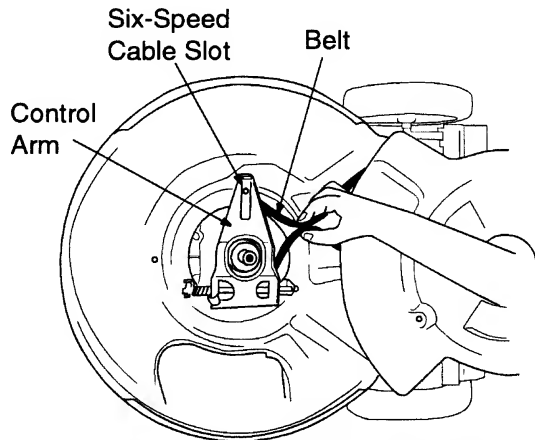
Step 11. Slide the belt out from between the belt keeper bracket and the idler pulley.



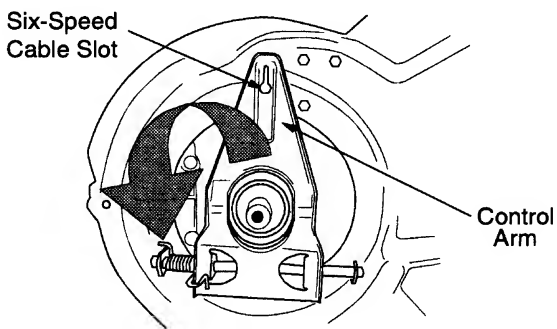
Step 12. Pivot baffle towards the rear of the mower.



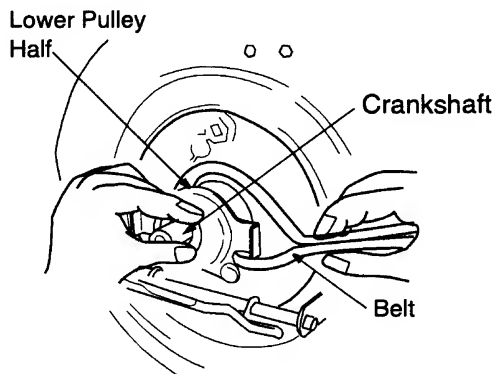
Step 13. Squeeze the belt together and push belt forward. Press the control arm inward towards the deck and remove the six speed cable from the slot.



Step 18. Pivot the control arm down and away from the pulley and the belt.



Step 19. Lift off the lower pulley assembly and remove the old belt from around the crankshaft.

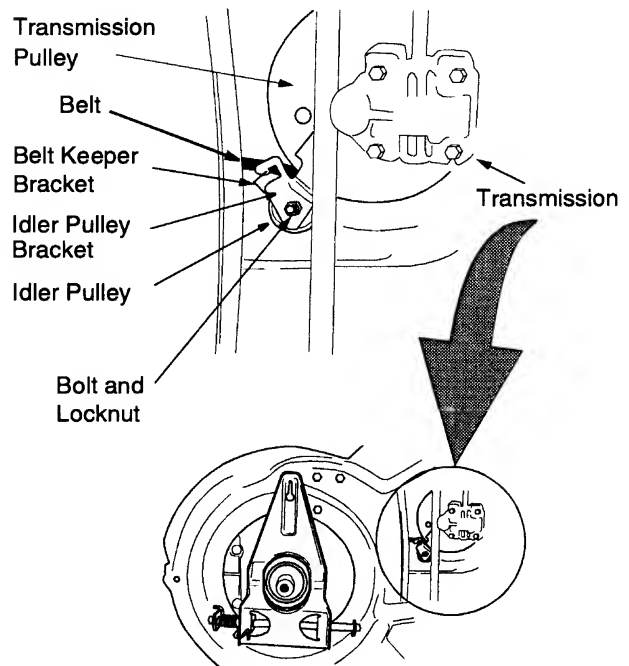


Step 14. Place the new belt over the transmission pulley. Start the belt in pulley groove and rotate pulley until belt is seated in transmission pulley.

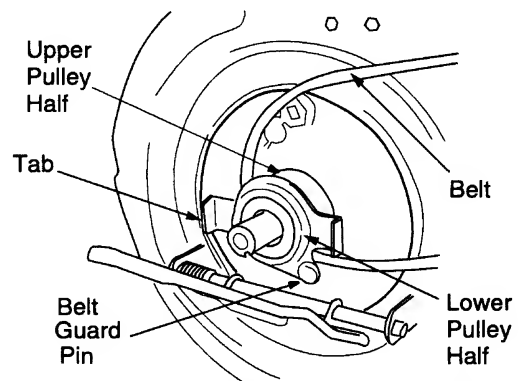
Step 15. Place belt between idler pulley and the belt keeper bracket.

Step 16. Using pliers, rotate the belt keeper bracket so that it snaps into slot on the idler bracket.

Step 17. Tighten the idler pulley bolt and locknut 1/2 turn using two 7/16" wrenches.

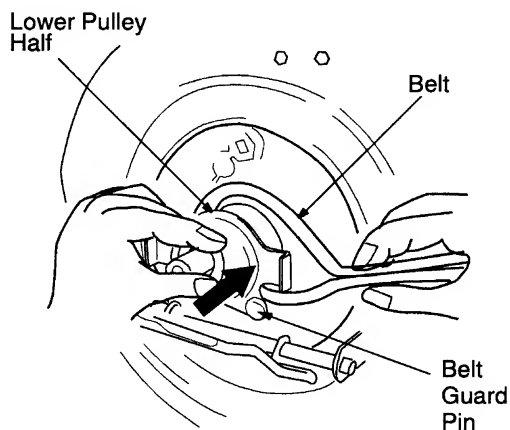


Step 20. Place belt between the two pulley halves on the crankshaft. Make sure to route the belt inside the belt guard pin.



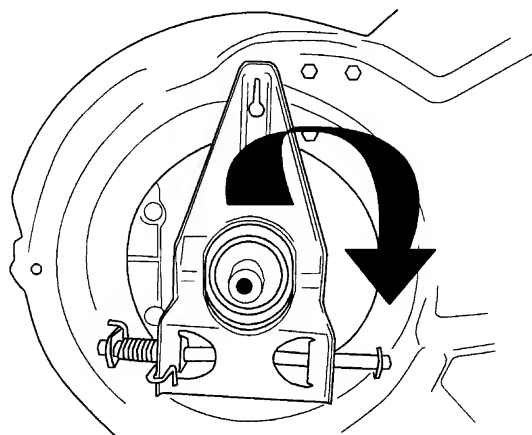
**IMPORTANT:** When replacing the belt, do not disassemble the lower pulley assembly.

Step 21. Pinch belt together so that it is not in the pulley groove, and the lower pulley can be pushed towards the engine.



Step 22. Pivot the control arm back to its original position and reinstall the six-speed cable into the slot.

Step 23. Check and make sure the belt is routed inside the pulley halves and the belt guard pin.



Step 24. Reinstall the bolt securing transmission to rear mower housing.

Step 25. Pivot the baffle back to its original position and secure with three hex screws earlier removed. You will need a 3/8" socket for these screws.

Step 26. Lightly lubricate the inside of the blade adapter and reinstall spacer, wave washer, blade adapter assembly and blade in this order.

Step 27. Tighten the hex bolt to secure the blade. Follow recommended torque which is 450-600 in. lbs.

## SECTION 11: LUBRICATION



**WARNING:** Always stop engine and disconnect spark plug wire before cleaning, lubricating or doing any kind of work on the lawn mower.

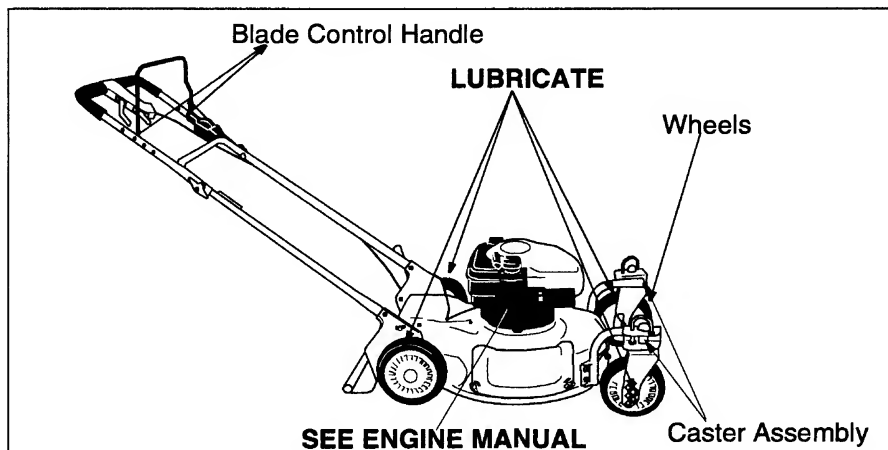


Figure 10

**Blade Control:** Lubricate the pivot points on the blade control handle and the brake cable at least once a season with light oil. See Figure 10. The blade control must operate freely in both directions.

**Wheels:** Lubricate the wheel at least once a season with light oil (or engine oil). Also, if the wheels are removed for any reason, lubricate the surface of the axle bolt and the inner surface of the wheel with light oil. See Figure 10.

**Caster Assembly:** Grease fittings are provided for easy lubrication of the swivel pins located on the front caster assembly. See Figure 10.

**Engine:** Follow engine manual for lubrication instructions.

---

## SECTION 12: OFF-SEASON STORAGE

The following steps should be taken to prepare lawn mower for storage.

- Clean and lubricate mower thoroughly as described in the lubrication instructions.
- Refer to engine manual for correct engine storage instructions.
- Coat mower's cutting blade with chassis grease to prevent rusting.
- Store mower in a dry, clean area. Do not store next to corrosive materials, such as fertilizer.

**NOTE:** When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rust-proof the equipment. Using a light oil or silicone, coat the equipment, especially cables and all moving parts.

## SECTION 13: TROUBLE SHOOTING GUIDE

Trouble	Possible Cause(s)	Corrective Action
Engine fails to start	Blade control handle disengaged. Spark plug wire disconnected. Throttle control lever not in correct starting position. Fuel tank empty, or stale fuel. Blocked fuel line. Faulty spark plug. Engine flooded.	Engage blade control handle. Connect wire to spark plug. Move throttle lever to FAST or START position. Fill tank with clean, fresh gasoline. Clean fuel line. Clean, adjust gap or replace. Crank engine with throttle in FAST position.
Engine runs erratic	Unit running in START position. Spark plug wire loose. Blocked fuel line or stale fuel.  Vent in gas cap plugged. Water or dirt in fuel system. Dirty air cleaner. Carburetor out of adjustment.	Move throttle lever to FAST position. Connect and tighten spark plug wire. Clean fuel line; fill tank with clean, fresh gasoline. Clear vent. Drain fuel tank. Refill with fresh fuel. Clean air cleaner. Adjust carburetor.
Engine overheats	Engine oil level low. Air flow restricted. Carburetor not adjusted properly.	Fill crankcase with proper oil. Remove blower housing and clean. Adjust carburetor.
Occasional skip (hesitates) at high speed	Spark plug gap too close.	Adjust gap to .030".
Idles poorly	Spark plug fouled, faulty or gap too wide. Carburetor improperly adjusted. Dirty air cleaner.	Reset gap to .030" or replace spark plug.  Adjust carburetor. Clean air cleaner.
Excessive vibration	Cutting blade loose or unbalanced. Bent cutting blade.	Tighten blade and adapter. Balance blade. Replace blade.
Mower will not mulch grass	Engine speed too low. Wet grass.  Excessively high grass.  Dull blade.	Set throttle between 3/4 and full throttle. Do not mow when grass is wet; wait until later to cut. Mow once at a high cutting height, then mow again at desired height or make a narrower cutting swath (1/2 width). Sharpen or replace blade.
Uneven cut	Wheels not positioned correctly.  Dull blade.	Place all four wheels in same height position.  Sharpen or replace blade.

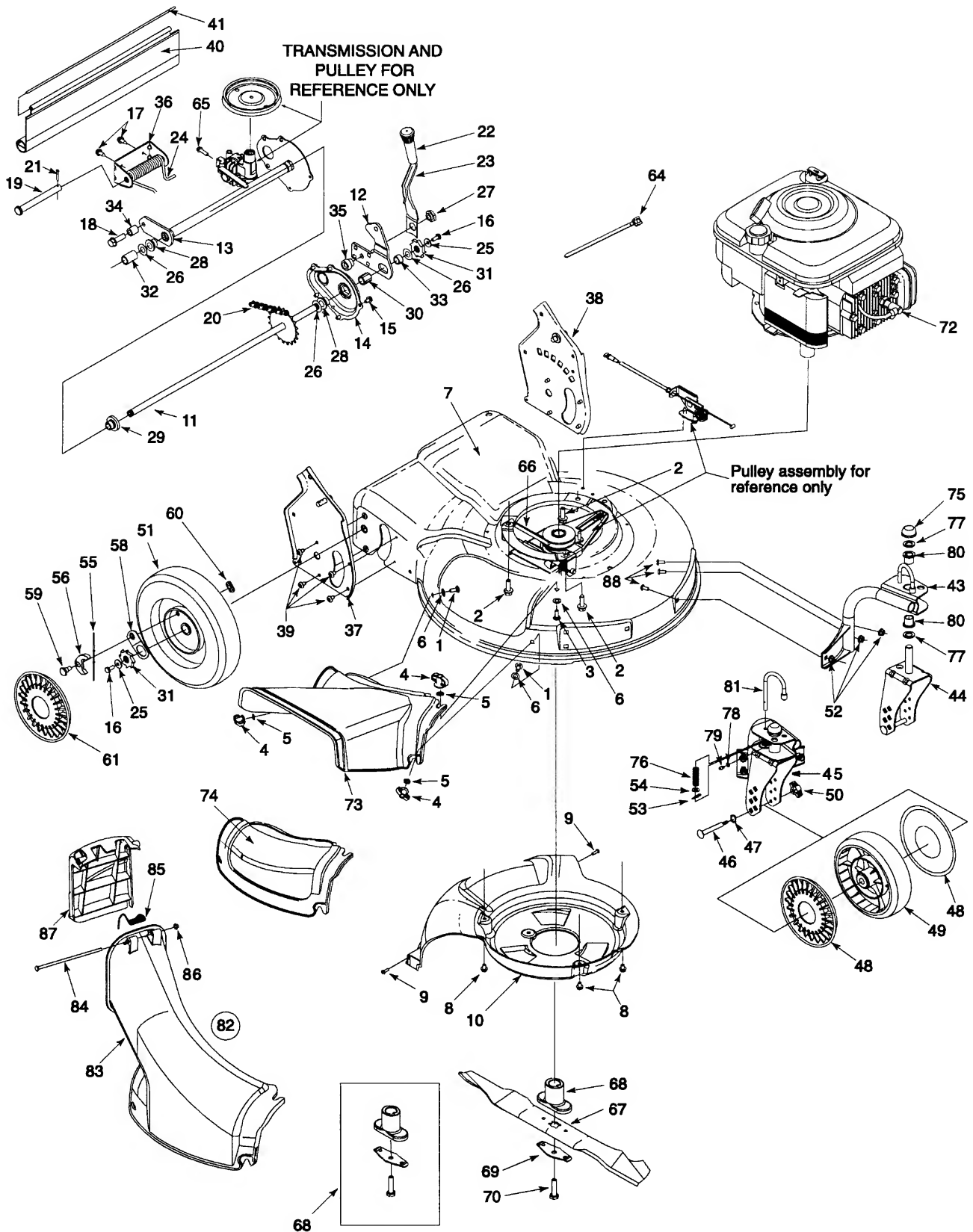
Refer to separate engine manual packed with your mower for more engine related information.

**NOTE:** For repairs beyond the minor adjustments listed above, contact your nearest authorized service dealer or call 1-800-800-7310 for the Customer Support Center.

**SECTION 14: YOUR NOTES**

Comments	Date

# Model 967

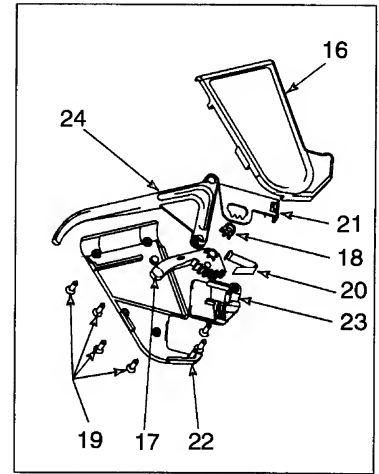
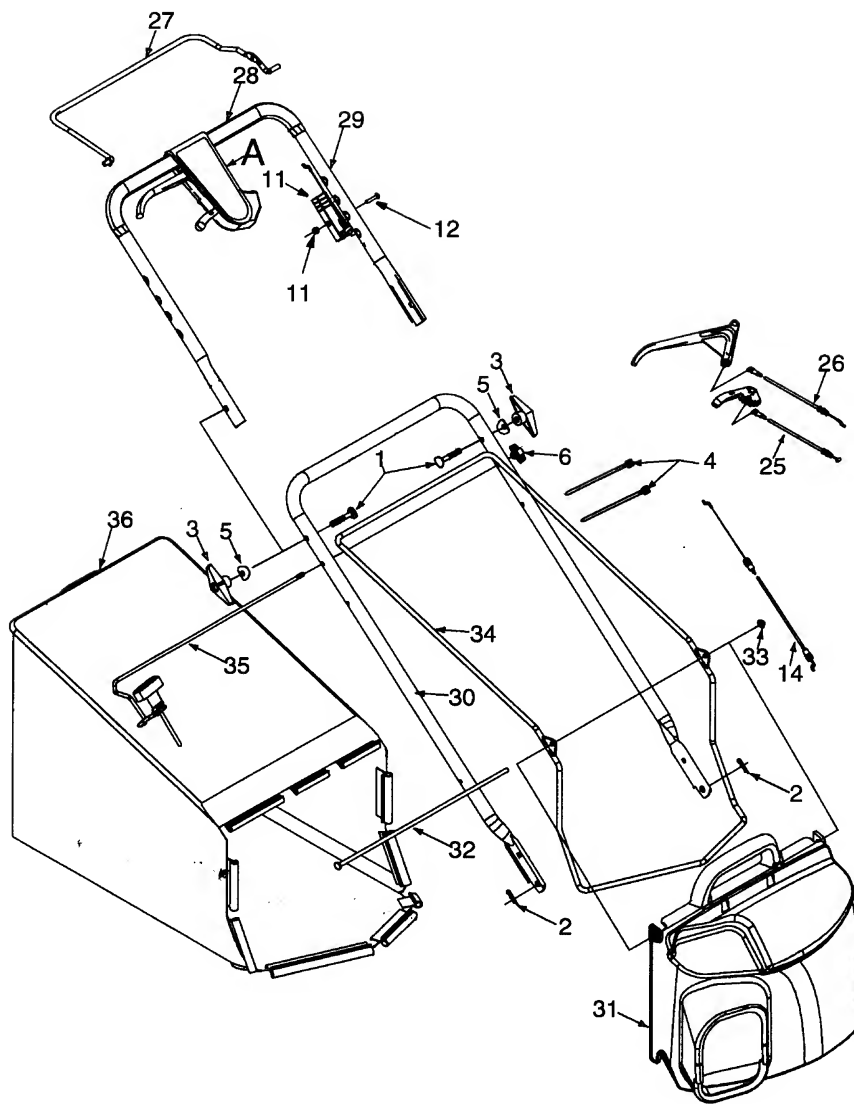




# Model 967

Ref. No.	Part No.	Code	Description	Ref. No.	Part No.	Code	Description
1	710-0134		Scr. Carr. 1/4-20 x .62	44	682-9024-0665		Caster Bracket Assembly: RH
2	710-0654A		Scr. TT:3/8-18:1.00	45	682-9026-0665	N	Caster Bracket Assembly: LH
3	710-0703		Scr. 1/4-20 x .750	46	711-1146		Caster Axle .374 Dia x 2.50"
4	712-0397		Wing Nut 1/4-20	47	736-0232		Wave Washer
5	723-0233		Nut, Push .25 I.D. x .50 O.D.	48	731-1887		Hub Cap, Gray w/ hole
6	736-0204		Wash. Fl. .334 I.D.x .62 x.03	49	734-1849	N	Wheel 7 x 2 Gray
7	782-0078-0689		Deck - 21"	50	712-0397		Wing Nut 1/4-20
8	710-0653		Scr. TT. 1/4-20 x .375	51	734-1850		Wheel 9 x 2 Gray, Slv.
9	710-1220		Scr. HL. 1/2-14 x .750	52	712-3004A		Lock Nut 5/15-18
10	731-1828		Baffle	53	714-0104		Cotter Pin .072 x .12 Lg.
11	638-0012		Rear Axle Assembly	54	736-0264		Fl. Wash. .330 x .830 x .060
12	782-0566		Pivot Arm Assembly	55	10622B		Spring, Ratchet, Plastic
13	682-7526		Trans. Axle Assembly	56	748-0381		Pawl - R.H.
14	682-7528		Chain Cover Assembly		748-0188B		Pawl - L.H. (Not Illustrated)
15	710-0653		Scr. TT 1/4-20 x .375	58	16855		Ratchet Pawl Plate
16	710-0751		Cap Screw HH 1/4-20 x .620	59	738-0137A		Scr. Shld. .340 x .285
17	710-0896		Scr. AB 1/4-14 x .825	60	712-0414		Top Lock Tab Weld Nut 1/4-20
18	710-1315		Scr. 3/8 116 x .25	61	731-1887		Hubcap -Gray
19	711-0835		Clevis Pin .50 Dia. x 4.82 Lg.	64	725-0157		Cable Tie
20	713-0453		Chain-Endls. #48 .500P x 24L	65	710-0604		Hex Scr. 5/16-18
21	714-0474		Cotter Pin .125O.D. x .75	66	754-0460		Belt
22	720-0223		Grip	67	742-0741		21" Mulching Blade
23	732-0803A		Spring Lever	68	753-0609		Blade Adapter Kit
24	732-0832		Torsion Spring	69	736-0524A		Blade Bell Suport
25	736-0270		Bell Wash. .285 x .75 x .082	70	710-1257		Hex Bolt 3/8-24x2.5"Lg.
26	736-0369		Fl. Wash..508 I.D. 1.000 x.020	72	735-0639		Spark Plug Insulator
27	738-0529		Nut Shld. .825 Dia. x .165 Lg.	73	731-1832		Side Discharge Chute
28	741-0324		Hx.Flq. Brg..506 I.D. x .590 L.	74	731-1833		Mulch Cover
29	741-0522		Hx.Flq. Brg. .506 I.D. x.715 L.	75	726-0214		Push Cap
30	741-0978		Hx. Slv. Brg..504 I.D. x .830 L.	76	732-0306		Compression Spring
31	748-0318		Wheel Rachet	77	736-0366		Fl. Wash. .5/8 I.D. x 1" O.D.
32	750-0151		Spa. .550 I.D. x /750 O.D.	78	736-0931		Fl. Wash. .203 x .403 x .040
33	750-0515		Spa. .51 .D. x .70 O.D. x 38 L.	79	737-3000		Fitting - Grease
34	750-0807		Spa. .385 x .624 x .700	80	741-0685		Flange Bearing
35	750-1056		Shld. Spa. .385 I.D. X .715 Lg.	81	747-0924		Locking Pin
36	782-0568		Brkt. - Ht. Adj. Spring	82	631-0066		Chute Ass'y
37	682-3052-0665		Handle Brkt. Ass'y. R.H.	83	731-1713A	N	Discharge Chute
38	682-3053-0665		Handle Brkt. Ass'y. L.H.	84	747-0965		Pivot Rod
39	710-1348		Scr. AB 1/4-14 x .500	85	732-0819		Torsion Spring
40	731-1901		Trail Shield	86	726-0111		Push Cap
41	732-0842		Trail Shield Wire	87	731-1874		Chute Door
43	682-9021A-0665		Caster Assembly L.H.	88	710-0260		Carr. Bolt 5/16-18 x.62
	682-9020A-0665		Caster Assembly R.H. (Not Shown)				

# Model 967



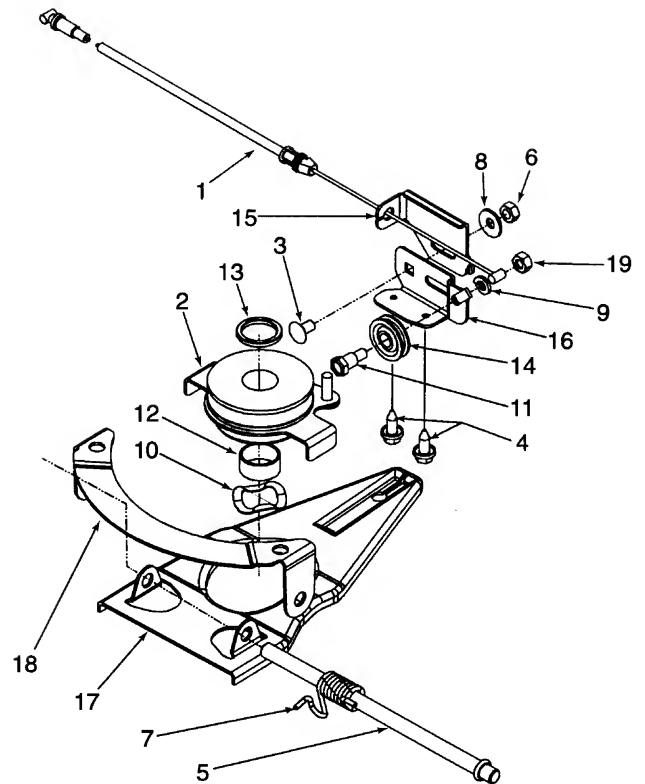
A

# Model 967

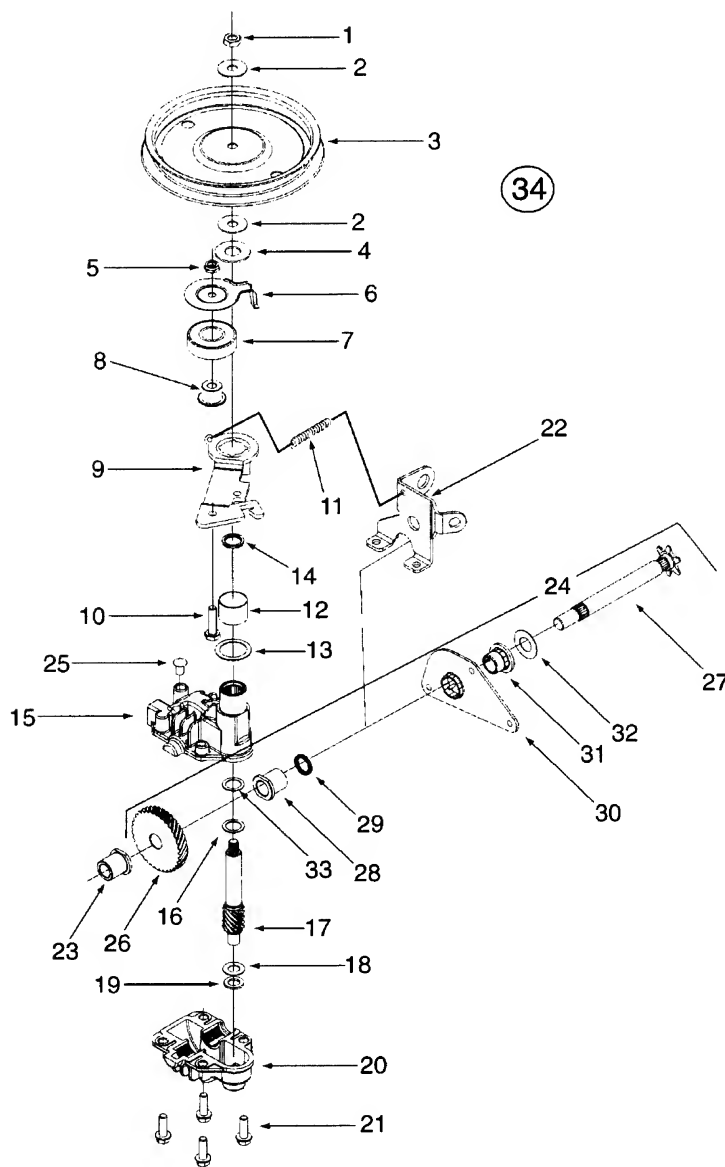
Ref. No.	Part No.	Code	Description	Ref. No.	Part No.	Code	Description
1	710-1174		Bolt Cur. Carr. 5/16-18 x 2.0	22	731-0905		Lower Control Housing
2	714-0104		Cotter Pin .072 x 1.12 Lg.	23	731-0906		Cable Mounting Cap
3	720-0241		Knob Ass'y Wingnut 5/16-18	24	731-0620		Control Lever
4	726-0240		Strap 4.3 Lg.	25	746-0939		6 Spd. Cable
5	736-0451		Wash. Sad. .320 ID x .830 OD	26	746-0710A		S.P. Cable
6	712-0429	N	Hex Nut 5/16 Thd.	27	747-0824		Control Handle
11	746-0883		Control Cable Box	28	720-0294		Foam Grip (2 Req'd.)
12	710-0605		Oval-C-Sunk Screw	29	749-0439B		Upper Handle
13	712-0324		Hex L-Nut 1/4 - 20 Thd.	30	749-0907A	N	Lower Handle
14	746-0922	N	Control Cable 60" Lg.	31	631-0071		Grassbag Cover w/Label
16	731-0904		Upper Control Housing	32	747-0939		Pivot Rod
17	731-0924		6 Speed Shift Lever	33	726-0106		Cap Nut
18	713-0397		Gear Insert	34	747-0937		Frame - Grassbag
19	710-0841		C Sunk Tap Screw #10 x .75	35	747-0940A	N	Rod, Support
20	732-0627		Shift Lever Spring	36	664-0076		Grassbag
21	16864		6 Spd. Rack Cable Brkt.				

# Pulley Assembly

Ref. No.	Part No.	Code	Description
1	746-0939		6 Spd. Cable
2	656-0613		Pulley Ass'y Multi-Spd.
3	710-0167		Scr. 1/4-20 x .50 Carr.
4	710-0896		Scr. AB 1/4-14 x .625 Hex wash
5	711-1114		Pivot Shaft
6	712-0287		Nut 1/4-20
7	732-0807		Torsion Spring LH
8	736-0270		Bell Wash. .265 X .75 X .062
9	736-0329		Lock Wash. 1/4 Reg Duty
10	736-0526		Wave Wash. 1.38 x .88 x .029
11	738-0924		Shld.Scr. .340 x .350 x 1/4-20
12	750-1070		Slev Spcr .88 ID x1.00 OD x.48
13	750-1071		Slev Spcr .88ID x1.13ID x .12
14	756-0625		Roller Cable
15	782-7574-0665		6 Spd. Cable Adj. Bracket
16	782-7575-0665		6 Spd. Cable Mt. Bracket
17	782-7596		6 Sp. Control Arm
18	782-7597		6 Sp. Pivot Bracket
19	712-0138		Hex Nut 1/4-28



# Transmission Assembly: 618-0263A



Ref. No.	Part No.	Code	Description
1	712-3025		Hx. Jam Nut 5/16-24
2	736-0425		Bell Wash. .325 x .930 x .045
3	756-0656		Pulley
4	736-3084		Fl. Wash. .510 x 1.120 x .060
5	712-0896		Hx. Jam Nut 1/4-28
6	782-7598		Belt Keeper
7	741-0600		Bearing
8	750-1050		Flange Spacer
9	682-0027A	N	Idler Bracket Assembly
10	710-0299		Hx. Cap Scr. 1/4-28 x 1.00 Gr. 5
11	732-0849A	N	Extension Spring
12	741-0682A	N	Bearing Sleeve
13	736-0570		Fl. Wash. .885 x 1.145 x .030
14	721-0329		Oil Seal
15	618-0253		Upper Housing Assembly
16	736-0616	N	Thrust Wash. .504 x .700 x .030
17	717-1487	N	Pinion Shaft 10 T.
18	736-0314		Thr. Wash. 3/8 x .70 x .030
19	736-0569		Thr. Wash. .388 x .625 x .062
20	618-0252		Lower Housing Assembly
21	710-0642		Hx. Scr. 1/2-20 x .75
22	782-7601A	N	Cable Bracket
23	741-0674		Bearing
24	611-0066		Shaft Assembly
25	721-0325		Plug
26	717-1469		Gear 34 T.
27	711-1168		Output Shaft 6 T.
28	741-0673		Flange Bearing
29	721-0329		Oil Seal
30	782-7595		Pivot Bracket
31	741-0324		Flange Bearing
32	736-0369		Wash. Fl. .508 I.D. x 1.00 O.D. x .020
33	741-0690	N	Bearing
34	618-0263A		Transmission Comp.

# MANUFACTURER'S LIMITED WARRANTY

For TWO YEARS from the date of retail purchase within the United States of America, its possessions and territories, the manufacturer will, at its option, repair or replace, for the original purchaser, free of charge, any part or parts found to be defective in material or workmanship. This warranty covers units which have been operated and maintained in accordance with the operating instructions furnished with the unit, and which have not been subject to misuse, abuse, commercial use, neglect, accident, improper maintenance or alteration.

Normal wear parts or components thereof are subject to separate terms as noted below in the "No Fault Ninety Day Consumer Warranty" clause.

All normal wear part failures will be covered on this product for a period of 90 days regardless of cause. After 90 days, but within the two year period, normal wear parts failures will be covered ONLY IF caused by defects in material or workmanship of OTHER component parts. Normal wear parts are defined as batteries\*, belts, blades, blade adapters, grass bags, rider deck wheels, seats, snow thrower skid shoes, shave plates and tires.

**How to obtain service:** Warranty service is available, with proof of purchase, through your local authorized service dealer. To locate the dealer in your area, please check the yellow pages or contact the Customer Service Department of the manufacturer, P. O. Box 368022, Cleveland, Ohio 44136-9722. Phone 1-800-800-7310. The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by the service department of the manufacturer.

**Transportation charges:** Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser.

**Units exported out of the United States:** The manufacturer does not extend any warranty for products sold or exported outside of the United States of America, its possessions and territories, except those sold through the manufacturer's authorized channels of export distribution.

## **Other Warranties:**

1. The engine or component parts thereof carry separate warranties from their manufacturers. Please refer to the applicable manufacturer's warranty on these items.
2. \*Batteries are covered by a 90-day replacement warranty.
3. Log splitter pumps, valves and cylinders or component parts thereof are covered by a one year warranty.
4. All other warranties, express or implied, including any implied warranty of merchantability or fitness for a particular purpose, are hereby expressly disclaimed in their entirety.
5. The provisions as set forth in this warranty provide the sole and exclusive remedy of the manufacturer's obligations arising from the sales of its products. The manufacturer will not be liable for incidental or consequential loss or damage.

**How state law relates to this warranty:** This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Certain disclaimers are not allowed in some states and therefore they may not apply to you under all circumstances.

**NOTE:** This warranty does not cover routine maintenance items such as lubricants, filters, blade sharpening and tune-ups, or adjustments such as brake adjustments, clutch adjustments or deck adjustments. Nor does this warranty cover normal deterioration of the exterior finish due to use or exposure.